## Colonel Francis X. "Duke" Kane Inducted 2010



Colonel Francis X. "Duke" Kane was born 12 December 1918 in Philadelphia, Pennsylvania, and graduated from South Hills High School in Pittsburgh in June 1936. He attended the United States Military Academy at West Point and graduated in 1943 with a bachelor's degree in engineering. During World War II, he was a flight instructor for American, French, British, Dutch, and Brazilian pilots and also served in 1945 with the 508th Fighter Group in the Asiatic-Pacific Theater.

Colonel Kane remained in uniform with the U.S. Air Force (USAF) until March 1970, at one point serving as assistant air attaché in the U.S. Embassy, Paris. Principally, from the Korean War onward, his assignments involved advanced planning. That work included the initial development of systems analysis and applications of early computers, policy planning during the evolution of the U.S. space program, and systems and technology planning. Concepts forwarded by Colonel Kane during the 1960s included space-based missile warning (Defense Support Program), space-based missile defense, manned maneuvering reentry vehicles (Space Shuttle), detection and attack of mobile missiles, laser anti-satellite weapons, the advanced ballistic missile (MX or Peacekeeper), and a navigation satellite (NAVSAT or GPS) system.

As Air Force Systems Command chief for space and ballistic missile planning under General Bernard Schriever, Colonel Kane was a principal leader in Project Forecast, the highly classified study during 1963–1964 that contemplated USAF air, missile, and space requirements for the strategic environment of 1975. Although his name appears nowhere in it, he also conceived and facilitated production of the highly prized *Space Planners Guide*, dated 1 July 1965. In 1969, he was a member of President Richard Nixon's Space Task Group. At the time of his retirement from active duty, Colonel Kane was serving as deputy for development plans at the Space and Missile Systems Organization (SAMSO). In an official USAF news release announcing his retirement, the colonel said he believed strongly in humankind's future in space, "not because of

military or government probes but because commercial and economic development [would] demand [it]."

While still in uniform, Colonel Kane completed a master's degree in political science and a doctorate from Georgetown University. He taught courses at the University of California, Los Angeles (UCLA), the Catholic University of America, and Pepperdine College. In addition, he addressed scientific and lay groups all over the United States on diverse topics, such as war and revolution, trends in military thought, and plans for rescuing astronauts stranded in space. Many of his early articles appeared in journals or magazines such as *Air University Review*, *Air Power Historian*, *Air Force and Space Digest*, *Missiles and Rockets*, *Orbis*, and *Fortune*. His piece titled "Reflections on Launch Windows," was published in the *Air University Review* of May–June 1965, a special issue on space operations that he initiated and that Praeger reproduced in 1966 as a book titled *The U.S. Air Force in Space*. During 1968–1970, he anonymously coauthored with Stefan Possony and Jerry Pournelle a doctrinal book titled *The Strategy of Technology: Winning the Decisive War*, which became a textbook in all three service academies, Air War College, and the National War College. An updated, online version appeared in 1997.

As a civilian, Dr. Kane spent 11 years with TRW Corporation as requirement analysis manager. His "Space Age Geopolitics" article in the Winter 1971 issue of *Orbis*, shows he already recognized space power as an enabler of an information-led revolution in military affairs. In 1981, he joined Rockwell International as director of strategic systems, with an emphasis on space systems. After retiring from Rockwell in 1986, he remained a consultant to that company and, later, to Boeing North American, Inc. For his active participation in international committees on space safety and rescue, space debris, and as liaison of the Scientific Legal Committee, he was elected Fellow of the International Academy of Astronautics (IAA). The American Institute of Aeronautics and Astronautics (AIAA) also recognized him as a Fellow for his leadership in space programs and national space planning.

Dr. Kane continued to influence national strategy, policy, and technology programs from the 1970s into the early 21st century. During 1978–1992, he chaired the Strategy Working Group, a unique government-sponsored forum that involved nationally and internationally known experts who produced classified reports on various topics, such as spaceflight, information warfare, and ballistic missile defense. In 1980, as a participant in the Citizen's Advisory Council on National Space Policy, Dr. Kane prepared transition team papers for the incoming Reagan administration. He contributed to the Air Force's Project Forecast II and Spacecast 2020 studies in 1985–1986 and 1993–1994, respectively. In 1993, he founded the GPS International Association. Also during the 1990s, he participated in the GPS Independent Review Team, the U.S. Department of Transportation Civil GPS Service Interface Committee, and authored more than 20 articles on GPS and other space-based systems. In 1999, Dr. Kane founded the Schriever Institute, dedicated to expanding the leading role of the United States among spacefaring nations.